

Thioflavine S

Cat. No.:	HY-D0972
CAS No.:	1326-12-1
Target:	Fluorescent Dye
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

Thioflavin S

SOLVENT & SOLUBILITY

In Vitro	H ₂ O : ≥ 50 mg/mL * "≥" means soluble, but saturation unknown.
In Vivo	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (Infinity mM); Clear solution; Need ultrasonic and warming and heat to 60°C

BIOLOGICAL ACTIVITY

Description	Thioflavine S is a fluorescent histochemical marker of dense core senile plaques. Thioflavine S can be used for Alzheimer's research ^[1] .
In Vitro	<p>Thioflavine S staining protocol</p> <ol style="list-style-type: none"> 1. Deparaffinization and hydration of tissue sections: Place slides in holders and treat with the clearing agent xylene (paraffin solvent) and a series of graded EtOH as follows: <ul style="list-style-type: none"> 100% xylene - 5 min 100% xylene - 5 min 50%/50% xylene/100% EtOH - 3 min 100% EtOH - 3 min 95% EtOH - 3 min 70% EtOH - 3 min 50% EtOH - 3 min Water - 2 x 3 min Note: Change the solns after about 5 uses or when you see the soln is not cleanly running off the slides, indicating too much paraffin in them. 2. Incubate in filtered 1% aqueous Thioflavine-S for 8 minutes at room temperature (filter Thioflavin-S before each use). Note: protect thioflavin-S from light, and protect the stained slides from light as much as possible. Thioflavin-S stain should be stored at 4°C. 3. Wash 2x 3 min in 80% ethanol 4. Wash 3 min in 95% ethanol 5. Wash with 3 exchanges of distilled water 6. Coverslip in aqueous mounting media and allow slides to dry in the dark overnight.

7. Next day, seal coverslip with clear nail polish.

8. Analyze slides within the next few days-weeks because the staining will fade with time. Store the slides in the dark at 4°C. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Adv Mater. 2022 Oct 4;e2207107.
- EBioMedicine. 2022 Apr;78:103980.
- Basic Res Cardiol. 2021 Dec 16;116(1):65.
- Alzheimers Res Ther. 2024 Jan 20;16(1):15.
- J Ginseng Res. 2021 Mar 22.

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REFERENCES

[1]. McLellan ME, et al. In vivo imaging of reactive oxygen species specifically associated with thioflavine S-positive amyloid plaques by multiphoton microscopy. J Neurosci. 2003 Mar 15;23(6):2212-7.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA